

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/735,105	12/11/2003	Hiroshi Yamamoto	112780-039	1880		
43793	7590 06/22/2006		EXAMINER			
EVEREST INTELLECTUAL PROPERTY LAW GROUP P. O. BOX 708 NORTHBROOK, IL 60065			PATEL, VISHAL A			
			ART UNIT	PAPER NUMBER		
,			3673			
				DATE MAILED: 06/22/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)				
		10/735,105	YAMAMOTO, HII	ROSHI			
		Examiner	Art Unit				
_		Vishal Patel	3673				
Period fo	The MAILING DATE of this communicat or Reply	ion appears on the cover shee	t with the correspondence a	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL nsions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communical period for reply is specified above, the maximum statutor to reply within the set or extended period for reply will, I reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ING DATE OF THIS COMMU CFR 1.136(a). In no event, however, ma ation. y period will apply and will expire SIX (6) I by statute, cause the application to becom	JNICATION. By a reply be timely filed MONTHS from the mailing date of this to the ABANDONED (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed or	n 19 Anril 2006					
•	_	☐ This action is non-final.					
3)□	,-	this application is in condition for allowance except for formal matters, prosecution as to the merits is					
٥,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims	p,,	,				
· <u> </u>		ation					
• —	✓ Claim(s) 1-3 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
·	is) Claim(s) is/are allowed. is) ⊠ Claim(s) <u>1-3</u> is/are rejected.						
•	Claim(s) is/are objected to.						
· · · · · · · · · · · · · · · · · · ·	-	and/or alaction requirement					
ا (٥	Claim(s) are subject to restriction	and/or election requirement.					
Applicati	on Papers						
9)[The specification is objected to by the Ex	kaminer.					
10)[The drawing(s) filed on is/are: a)[☐ accepted or b)☐ objected	to by the Examiner.				
	Applicant may not request that any objection	to the drawing(s) be held in abe	yance. See 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the	correction is required if the draw	ring(s) is objected to. See 37 C	FR 1.121(d).			
11)	The oath or declaration is objected to by	the Examiner. Note the attac	hed Office Action or form P	TO-152.			
Priority ι	inder 35 U.S.C. § 119						
	Acknowledgment is made of a claim for f ☐ All b) ☐ Some * c) ☐ None of:	foreign priority under 35 U.S.C	C. § 119(a)-(d) or (f).				
,	1. Certified copies of the priority doc	uments have been received.					
	2. Certified copies of the priority doc		n Application No.				
	3. Copies of the certified copies of the			l Stage			
	application from the International	, ,					
* 5	see the attached detailed Office action fo		not received.				
Attachmen	• •	🗂 .					
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-9		ew Summary (PTO-413) No(s)/Mail Date				
3) 🔲 Infor	nation Disclosure Statement(s) (PTO-1449 or PTO r No(s)/Mail Date	· —	of Informal Patent Application (PT	O-152)			

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki et al (US. 6,302,910).

Yamazaki discloses a sliding contact seal structure, having a shaft member having a sliding contact surface that comes into contact with a seal member (41) formed from urethane or fluoro-resin or PTFE or polyurethane or like materials. The sliding contact surface is defined to have a surface energy of 50 dyne/cm or less for contact with the seal member (the shaft is made of stainless steel and is coated with a coating of nickel and polytetrafluoroethylene similar materials as applicants materials disclosed in the specification). The sum of the surface energy of the seal member and the surface energy of the shaft member is 95 dyne/cm or less (this is the case since the seal is made of polytetrafluoroethylene and the shaft has a coating of nickel and polytetrafluoroethylene).

The limitations in claim 3 are considered to be product by process limitations and are given little patentable weight in an apparatus claim (the film forming material formed by any one of chemical deposition, plasma CVD, physical vapor deposition, vacuum deposition, and sputtering).

Application/Control Number: 10/735,105 Page 3

Art Unit: 3673

Response to Arguments

3. Applicant's arguments filed 4/19/06 have been fully considered but they are not persuasive.

Applicants' argument that the reference of Yamazaki fails to disclose the surface energy claimed is not persuasive because as described above that the shaft has a coating that is similar or same material as to applicants' shaft material and has a seal that is made of a material that is similar or same as applicants' seal material.

Furthermore it is pointed out that the reference of Shrontz reads on the claims 1-3. The reference call for a seal made of SP1 Garlock, which is a material that applicant's seal is made of. Furthermore evidence is pointed out by JP 56016698A that chromium oxide has a 36 dyne/cm.

Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Turner, Jr. et al. and JP 56016698A.
- 5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Application/Control Number: 10/735,105 Page 4

Art Unit: 3673

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP June 20, 2006

> Vishal Patel Primary Examiner Tech. Center 3600